DRAFT: WASTE COMPOSITION

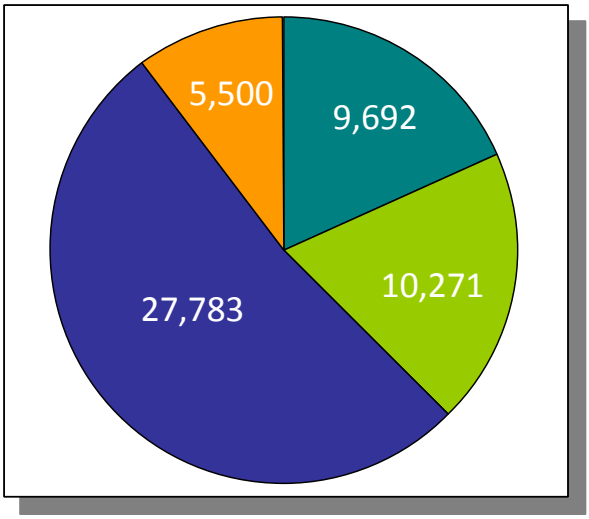
Waste Disposal

Solid Waste in Mountain View is generated by:

- Single-family residents (in detached homes, duplex, triplex and four-unit dwellings receiving cart refuse service and split-cart recycling service)
- Multi-family residential units (includes apartments, condominiums, and townhouses of more than four units receiving bin refuse service and group cart recycling service)
- Commercial businesses
- Construction and demolition (C&D) sites
- Other disposal at facilities other than SMaRT

The pie chart shows the amount of disposed waste attributed to each of these categories in 2010.

Citywide Disposal (tons)	
Single-family	9,692
Multi-family	10,271
Commercial	27,783
C&D	5,500
Total	53,246



Waste Composition

A Waste Characterization study was performed in 2010 to find out how much paper, glass, food waste and other materials is being discarded in Mountain View. The results of the study are highlighted below. The complete study is available at the Zero Waste page of the City's website at www.mvrecycle.org. This information is used to plan future waste reduction and diversion programs. For this study, waste was assigned to one of ten material classes: **Paper, Plastic, Glass, Metal, Electronics, Organics, C&D, Household Hazardous Waste (HHW), Special Waste, and Mixed Residue**. Materials were further sorted into 88 standard material categories (e.g., newspaper, office paper, glass bottles, PETE food packaging, small appliances, plastic grocery bags, etc.). Waste from the single-family, multi-family and commercial sectors was hand-sorted into the 88 material categories and weighed. Construction and demolition waste was visually sorted and measured by volume. The above wastes were all sampled prior to being processed at the SMaRT Station to recover recyclable materials. The Material Processing Facility (MRF) at the SMaRT Station uses mechanical equipment and human labor to sort and separate incoming waste to capture marketable recyclable and compostable material. The waste remaining at the end of the sorting process is called "Residual" and is sent to landfill. Residual waste was also hand-sorted into the 88 material categories and weighed.

Not all waste generated in Mountain View was included in the study. The residential, commercial and construction waste sampled for the study represents about 75% of Mountain View's waste stream. Unsampled wastes include material delivered to SMaRT in roll-off/drop boxes and compactors by Recology (16%); self-haul to SMaRT (1%); and "out of system" disposal (i.e., materials that do not pass through the SMaRT Station, because they are self-hauled directly to other facilities or landfills) (8%).

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Overall Recoverability Grouping

To identify additional diversion opportunities, the 88 material categories were classified according to their recoverability using five groupings:

Compostable/Potentially Compostable (green) – all materials considered compostable or potentially compostable.
Recyclable Paper (blue) – all paper materials considered recyclable.
Other Recyclables (purple) – all plastic, metals, glass, and other materials considered recyclable.
Potentially Recyclable (peach) – all materials where markets are emerging or being developed to process or recover materials.
Problem Materials (brown) – all materials for which there is no existing processing option.

The composition of Mountain View's waste according to recoverability categories is shown in the following table and on Figure 8. The most prevalent materials being disposed by residents and businesses before processing at the SMaRT Station, by weight, include food (27%), compostable paper (9%), yard trimmings (5%), and cardboard (5%), shown on Figure 3.

	Prior to SMaRT Processing			
Recoverability Category	**Residential Est. %**	**Commercial Est. %**	**C&D Est. %**	**Residual Est. %**
Compostable/Potentially Compostable	46%	42%	7%	57%
Recyclable Paper	13%	14%	1%	14%
Other Recyclables	17%	27%	32%	13%
Potentially Recyclable	6%	4%	11%	4%
Problem Materials	18%	13%	49%	12%
Total	**100%**	**100%**	**100%**	**100%**

The following pages contain composition and recoverability information for overall waste being disposed by residents and businesses (prior to being processed to remove materials), for construction and demolition waste (prior to being processed), and for residual waste headed to landfill after processing.

Diversion Opportunities

To gain the most additional diversion, the Zero Waste Plan should look first at the top materials being disposed and assess the viability of new programs based on such factors as cost and availability of markets. Viable markets for recovered materials are essential to the success of diversion programs. Reliance on mere separation and collection of materials is inadequate unless those materials can be effectively marketed over the long term at a minimal public subsidy. In addition, since all incoming waste (except residual) shown in the table above is sorted to remove additional recyclable or compostable material prior to landfilling, choices that would result in additional "up-front" diversion could affect choices made for residual diversion later.

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Waste Disposed by Residents and Businesses[1]

Figure 1: Composition of Disposed Waste

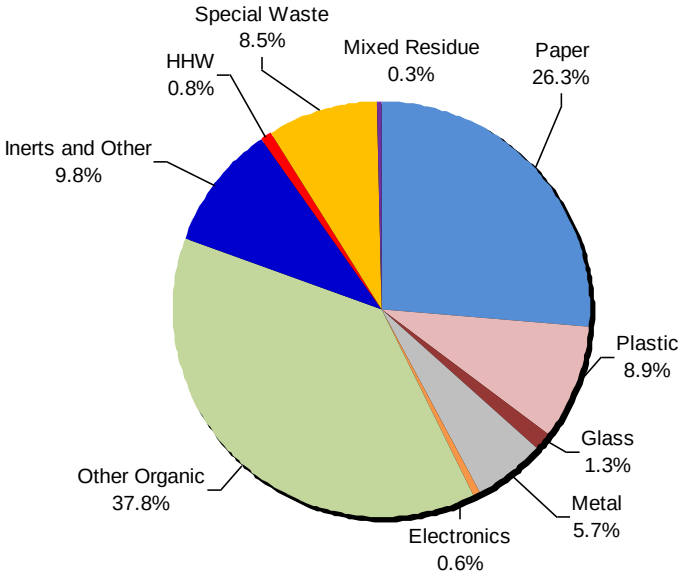

Figure 2: Recoverability Grouping

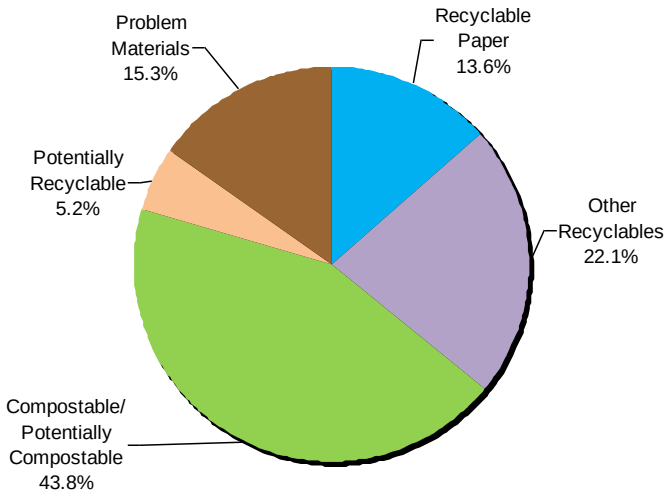

Figure 3:Ten Most Prevalent Disposed Materials - Overall

Material	Est. Percent	Cum. Percent	Est. Tons
Food	27.0%	27.0%	11,108
Compostable Paper	9.4%	36.5%	3,880
Leaves and Grass	5.3%	41.8%	2,194
Uncoated Corrugated Cardboard	4.8%	46.6%	1,960
Bulky Items	3.4%	50.0%	1,413
Diapers	3.2%	53.3%	1,335
Other Miscellaneous Paper	3.1%	56.4%	1,294
Remainder/Composite Paper	3.0%	59.4%	1,240
Other Ferrous	2.9%	62.3%	1,197
Other Office Paper	2.3%	64.7%	960
Total	**64.7%**		**26,581**

[1] Charts may not add to 100% due to statistical rounding

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Waste Disposed from Construction and Demolition (C&D) Sites[2]

Figure 4: Composition of Disposed Waste

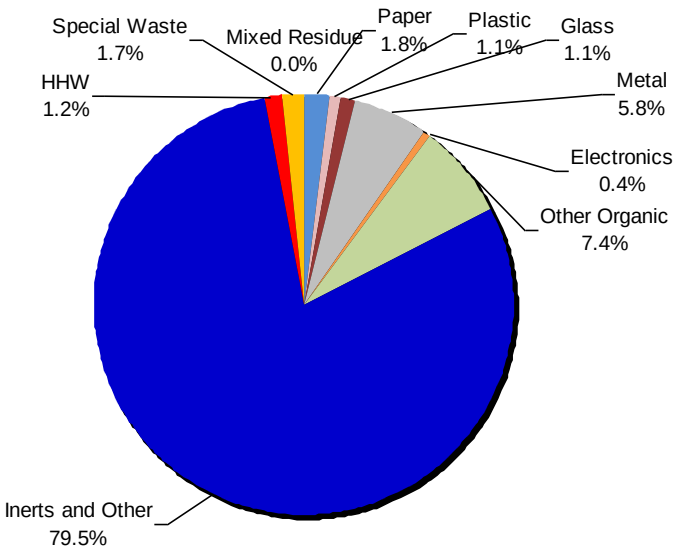

Figure 5: Recoverability Grouping

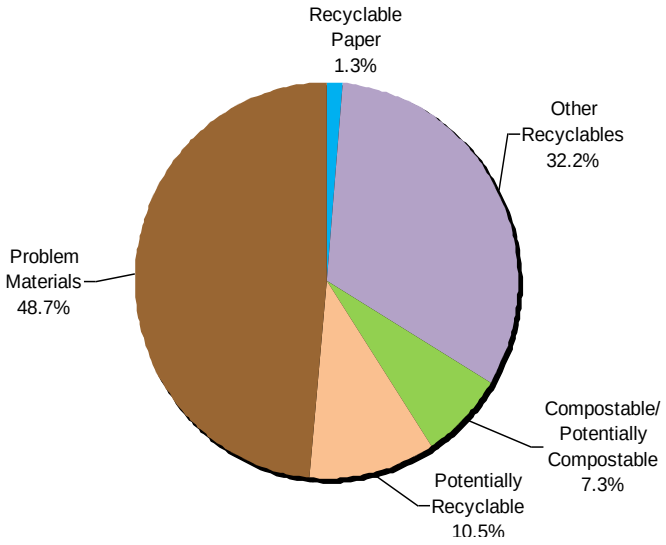

Figure 6: Ten Most Prevalent Disposed Materials – C & D

Material	Est. Percent	Cum. Percent	Est. Tons
Remainder/Composite Construction and Demolition	28.2%	28.2%	1,267
Painted/Demolition Gypsum Board	11.3%	39.4%	506
Rock, Soil, and Fines	6.3%	45.7%	283
Clean Gypsum Board	6.3%	52.0%	282
Untreated Dimensional Lumber	5.1%	57.2%	231
Treated Engineered Wood	4.8%	62.0%	218
Other Ferrous	4.6%	66.6%	207
Concrete	4.3%	70.9%	195
Untreated Engineered Wood	4.0%	74.9%	181
Prunings and Trimmings	3.3%	78.2%	147
Total	78.2%		3,516

[2] Charts may not add to 100% due to statistical rounding

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Residual Waste Going to Landfill (after SMaRT Processing[3])

Figure 7: Residual Waste Composition

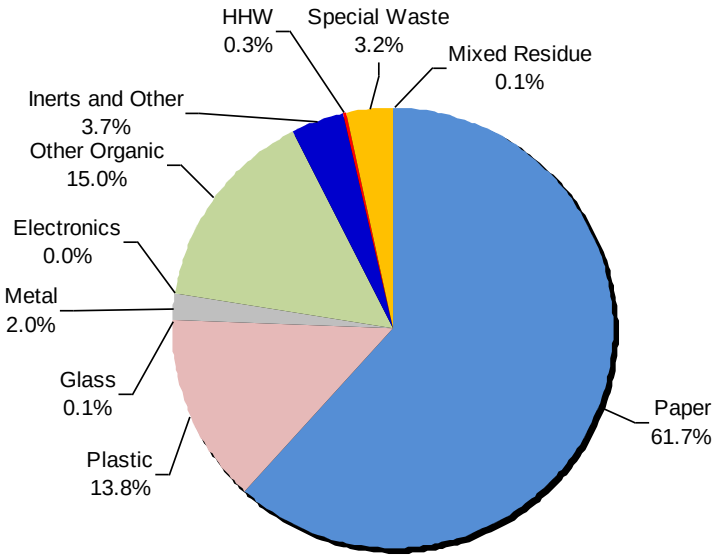

Figure 8: Recoverability Groupings

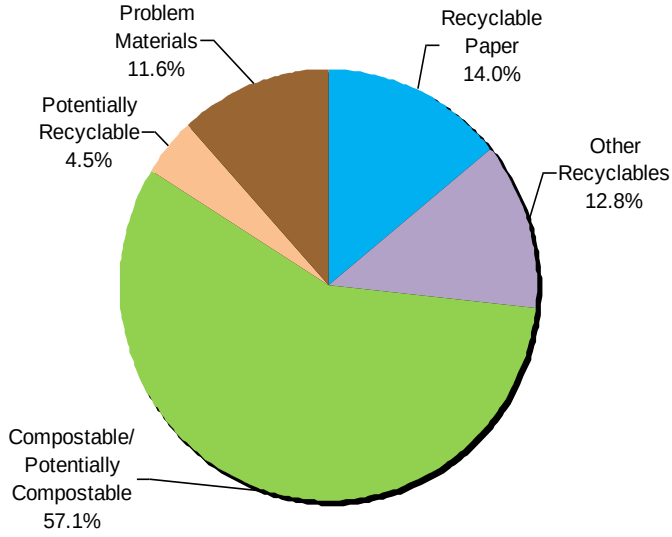

Figure 9: Ten Most Prevalent Disposed Materials – Residuals to Landfill (From Mountain View, Sunnyvale and Palo Alto Waste)

Material	Est. Percent	Cum. Percent	Est. Tons
Compostable Paper	38.7%	38.7%	43,619
MRF Fines (Processed/compostable)	11.3%	50.0%	12,709
Food	8.0%	58.0%	9,028
Other Miscellaneous Paper	3.9%	61.9%	4,380
Mixed Residue	3.9%	65.7%	4,349
Uncoated Corrugated Cardboard	3.3%	69.0%	3,674
Other Film	3.2%	72.2%	3,587
Diapers	2.3%	74.5%	2,580
Textiles	2.2%	76.7%	2,463
Trash Bags	2.0%	78.6%	2,232
Total	78.6%		88,623

[3] Charts may not add to 100% due to statistical rounding